**(Assignment created by Susan Dischiave)**

**Final Project**

The final project is a semester-long research effort that pulls together the main concepts, principles, and theories learned during the semester and synthesizes them into a single cohesive project. To do this you will select a business problem that you have been hired to solve using your newly-developed database skills. Frame your solution as if you are the database professional that has been asked to analyze and solve the problem identified.

This project is an **individual** assignment and will consist of the following two parts described below.

## Part 1: Final Report – Use this outline as the template for the report format in order to get full credit.

1. **Business Letter of Transmittal**

A business letter from you to me stating what is in your report and why you are sending the report to me. This is a single-spaced letter indicating that you have prepared the following report at my request. In the letter, identify the key documents enclosed. Make sure you state how you can be reached in case there are any questions.

1. **Title Page**

This is the first page of the report and includes the name of your project, the person the report was written to, your name, and the date the report was submitted.

1. **Table of Contents**

This is a quick review of the contents of your report, listing the headings or topical areas as they appear in the report. Please include page numbers. Microsoft Word does a nice job building the table of contents for you.

1. **Executive Summary**

The executive summary is a brief ***overview of the entire report***. This is not a description of the report but is a summary of the major sections of the report. ***The executive summary presents the content of your report in an abbreviated format.*** Begin with a paragraph introducing your topic and follow with a paragraph on each major section. End your executive summary with the same conclusion (or findings) found in your report. The Executive Summary should be one to two pages and single-spaced.

1. **Report Body**
   1. **Planning**

Copy and paste this section from your Planning section of your first installment. If I pointed out any mistakes in this section of your first installment, please fix them or you will lose points again.

* 1. **Analysis**

Copy and paste this section from your Analysis section of your first installment. If I pointed out any mistakes in this section of your first installment, please fix them or you will lose points again.

* 1. **Design**

Copy and paste your second installment (business rules and ERD) here. If I pointed out any mistakes in your second installment, please fix them or you will lose points again.

* 1. **Implementation**
* ***Description* –** Describe how the following database objects will be used to provide the information necessary for the decision-making process. Specifically, how will these forms and reports facilitate making the “5 decisions” that were identified in the business problem stated above?
* ***Input Forms***-- Include a screen print of each input form and describe what it does.
* ***Output Reports***-- Include a screen print of each output report then ***describe the decisions that can be made through its use.***
  1. **Additional Database Requirements**
* ***Support requirements*** --Describe how your solution will handle each of the following support services:
  + Database backup/recovery
  + Backup file retention
  + Data audit control and fraud detection
  + Data security and privacy
  1. **Supporting Documentation (use the provided templates)**
* ***Data dictionary*** --Describe the data stored in your database.

*Choose two significant tables (i.e. tables with lots of columns) to include here.*

*You do* ***not*** *need to include all tables.*

* ***System catalog***-- Describe all of the database objects (tables, forms, queries, and reports) stored in your database.

*Choose two of each object type (2 tables, 2 forms, 2 reports, etc.) to show here.*

*You do* ***not*** *need to include all database objects.*

* 1. **Conclusion & Recommendations**

This section contains your conclusion. In this section, state any additional thoughts and recommendations regarding the project.

**h. Lessons learned**

What **five** (5) lessons did you learn during the course of this project? Explain how the project relates to the material covered in class.

**i. Sources**

Include a complete list of all sources used in the preparation of your report. Don’t forget to use in-text citations any time you use material from these sources within your report. Use APA citation style. See this guide for more information: <https://owl.english.purdue.edu/owl/resource/560/01/>

**j. Appendices**

Include any pertinent information such as interview summaries, manual forms, reports and other documentation that adds to the understanding of the project. All items in the appendices must be referenced in your report.

**Part 2: Working Database**

You must implement your design by building a working database using any relational database management system (RDBMS) you choose. Microsoft Access and SQL Server are available via the iSchool. There are also open source RDBMSs such as MySQL, which is available on the Web as a free download from MySQL Downloads: <http://dev.mysql.com/downloads/>

Your database must consist of the tables, input forms, and output queries/reports required to implement your solution. Your solution does **not** need all the processing logic necessary to make it fully-functional.

For this project it is very important to keep its size and scope manageable. Consider building a database where the number of any single object in your database schema (tables, forms, reports) is from 6 – 10. This should be sufficient to demonstrate the principles learned in this course.

**Assignment Submission:**

There will be two separate assignments on blackboard for you to use:

* 1. **Paper:** You’ll submit your paper as a Turnitin assignment. When you submit, you will get a report with an “originality score” which tells you how similar your assignment is to other student reports or to published sources. Your score should be below 20% to indicate you are creating original work (not plagiarized). If your score is above 20% you should fix the highlighted sections and resubmit. **WARNING!!!** Turnitin will NOT allow you to resubmit until 24 hours have passed. Therefore, if you want to have the assignment done on time, PLEASE submit your first try several days in advance of the due date.
  2. **Working Database:** There will be an additional assignment drop box on blackboard for your database. This is not a Turnitin assignment.